

PROJECT #007

WILDLIFE TREATMENTS – HEMLOCK RUN STEWARDSHIP RE-AD

TREE PLANTING AND FENCING

SECTION B--SUPPLIES OR SERVICES AND PRICES/COSTS

SCHEDULE OF ITEMS

Item Number	Description	Quantity	Unit	Total Price
1	Shovel Plant Apple Trees	30	Each	
2	Auger Plant Conifer Trees	400	Each	
3	Construct Individual Fences	30	Each	
4	Install Tree Mats (Gov. Furnished)	30	Each	
5	Install Tree Guards (Gov. Furnished)	30	Each	
		Item Total:		

BIDDERS NOTES:

1. Show Me Trip – A field trip to representative sites will be conducted, date to be determined.
2. PA 1-Call - Contractor is responsible for calling PA 1-Call (1-800-242-1776) and adhering to those procedures before work begins at a site.
3. Multiple project activities may occur in each site. See the attached, Hemlock Run Stewardship Re-Ad Summary Document – Wildlife and NNIPS, for a list of activities by site.

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SECTION C - SPECIFICATIONS

DIVISION 100 - GENERAL SPECIFICATIONS

100. Scope of Contract

1. It is the purpose of this contract to secure services for planting trees, constructing woven wire individual tree fences, and installing government furnished tree mats and tree guards.
2. Sites 442-40, 446-33, 487-34 and 494-48 shall be planted the year following the opening restoration work, during the month of May.
3. Site 451-28 may be planted any year of the contract, during the month of May.
4. The Contractor shall furnish all labor, equipment, supervision, transportation, supplies (except those designated as Government-furnished) and incidentals, to perform all work necessary to plant trees.
5. **Description of Planting Stock** – In order to meet the intent of Allegheny National Forest Land and Resource Management Plan (2007) design criteria for 2070 Biological Diversity Guidelines - Only PA ecotypes will be accepted, if they are not available another PA ecotype species may substituted and/or the percent of another species increased to equal 100% with contracting officer approval.

See Contract Area Map(s).

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110. Location and Description

All sites are located on the Bradford Ranger District on the Allegheny National Forest.

Site 442-40

This site is a wildlife opening located off of an oil and gas (OGM) road, approximately two miles from the Kinzua Heights Road. It was constructed in 1998 and is maintained by yearly mowing.

The slope is gentle, ranging from 0-20 percent. The terrain is uneven, with scattered surface rock. Access is by pick-up truck.

One-hundred white spruce will be auger-planted in groups along the edge of the wildlife opening, to act as a screen from the roads. See Division 200, Technical Specifications, 210, for a description of the planting stock. The exact location of the white spruce will be determined with the Contractor at the time of implementation.

Site 446-33

This site is a wildlife opening, located off of the Kinzua Heights Road. It was constructed in the 1980's and is maintained by yearly mowing.

The slope is gentle, ranging from 0-20 percent. The terrain is uneven, with scattered surface rock. Access is by pick-up truck.

Three-hundred white spruce will be auger-planted in groups along the edge of the wildlife opening, to act as a screen from the roads. See Division 200, Technical Specifications, 210, for a description of the planting stock. The exact location of the white spruce will be determined with the Contractor at the time of implementation.

Site 451-28

This site is a wildlife opening off of FR 267A.

The slope is gentle, ranging from 0-20 percent. The terrain is uneven, with scattered surface rock. FR 267A is overgrown and not navigable by a vehicle; access to this opening is by ATV.

Ten apple trees will be shovel-planted, ten fences will be constructed and 10 tree guards and mats will be installed at this site. See Division 200, Technical Specifications, for a description of the planting stock and fence material. The exact location of the apple trees will be determined with the Contractor at the time of implementation.

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Site 487-34

This site is a wildlife opening off of FR 492. It was constructed in the 1980's with sections maintained by yearly mowing.

The slope is gentle, ranging from 0-20 percent. The terrain is uneven, with scattered surface rock. Access is by pick-up truck.

Ten apple trees will be shovel-planted, ten fences will be constructed and 10 tree guards and mats will be installed at this site. See Division 200, Technical Specifications, for a description of the planting stock and fence material. The exact location of the apple trees will be determined with the Contractor at the time of implementation.

Site 494-48

This site is a wildlife opening off of FR 100A. It was constructed in the 1980's with sections maintained by yearly mowing.

The slope is gentle, ranging from 0-20 percent. The terrain is uneven, with scattered surface rock. Access is by pick-up truck.

Ten apple trees will be shovel-planted, ten fences will be constructed and 10 tree guards and mats will be installed at this site. See Division 200, Technical Specifications, for a description of the planting stock and fence material. The exact location of the apple trees will be determined with the Contractor at the time of implementation.

120. Definitions

The following terms are defined for use in this contract:

121. Plantable Spot - A plantable spot is an area from which vegetation, ash, duff, slash and debris has been or can be removed, and a tree seedling can be planted and sheltered according to all specifications contained herein.

122. Unplantable Spot - An area within the specified spacing limits in which it is not possible to plant a tree seedling according to specifications.

123. Root Collar - The transition zone between stem and root. In tree seedlings it is identified by the presence of a slight swelling. In established woody vegetation it is the woody thickened portion of the taproot at the natural ground level of the plant.

124. Root Crown - The point at which the root of a plant joins with the stem or stems.

125. Scalping - The cutting of the aerial portion of vegetation at the natural ground line.

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130. Contractor Furnished Property

The contractor will furnish all tools and equipment such as planting bars, augers, shovels, post driver, scalping tools, pliers, fence, fence posts and planting bags needed to carry and plant the seedlings. The contractor will furnish all transportation for all materials and equipment to and from the job and arrange for employees to be at the planting sites.

140. Government-Furnished Property

141. The Government will supply flagging and/or pin flags to identify areas planted by the contractor.

142. The Government will supply all materials necessary to install tree mats.

143. The Government will supply all tree guards.

144. The Contractor shall request Government-furnished Property from the Contracting Officer's Representative 24 hours prior to it being needed. The contractor will pick up this property at the Bradford Ranger District Office. Upon pickup of the Government Furnished Property, loading, unloading and transportation from delivery point to the planting area is the responsibility of the Contractor. The Contractor shall receipt for government-furnished property when possession is transferred.

150. Meetings

The successful vendor will be contacted prior to individual projects to discuss details of work, location, priorities, etc. The Contracting Officer (CO) and Contracting Officer Representative (COR) are authorized to give verbal orders to the contractor authorizing work to be accomplished.

160. Notification

The Contractor is required to keep the CO/COR or designated Inspector informed of their work schedule and physical location of their work force to permit ready location and timely inspection of accomplished work. The Contractor shall also notify the CO at least monthly of the progress being attained on this project. This notification can be either oral or written.

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170. Safety

It is the contractor's responsibility to ensure that the work environment is safe for themselves as well as their employees. If the Contractor feels that a requirement of this contract would place them or their employees in an unsafe environment, then work should stop on that area of work and the contractor should contact the CO/COR immediately. Work on other areas of the contract that the Contractor does not view as unsafe should continue.

Contractor is required to follow all applicable OSHA standards (CFR 29), while working on the job site. In addition, it is recommended the successful contractor utilize appropriate personal protective safety equipment, which includes, but is not limited to, hard hats, ear protection, eye protection, and hand protection while working on project items. Contractor must keep the Government representative posted as to current site work, and must be especially alert to vehicular traffic during field operations.

All sites occur within active oil and gas leases.

The contractor shall **report all accidents** or incidents associated with this contract to the Forest Service representative within 24 hours.

180. Maintenance for Traffic

Existing roads shall be kept open to all traffic by the contractor while work is progressing. Appropriate warning signs to the public will be displayed.

190. Vehicle Operation

All-Terrain Vehicles (ATV) may be operated to travel to the work sites. ATV's may not be driven on roads open to the public. The operator is subject to fines if found using ATV's in manners other than for the purpose of transporting equipment and operator to the sites. If at any time Forest Service inspections indicate that soil damage is occurring due to the use of ATV's, such use will be suspended and the damage repaired by the contractor.

In addition, it is recommended that the Contractor utilize appropriate personal protective safety equipment/clothing, which may include, but is not limited to, a hard hat, leg protection, eye protection, ear protection, and hand protection, and a DOT approved ATV helmet (if using ATV's or UTV's) while working on this contract. State ATV/OHV permit requirements also apply.

The Forest Service may, during the administration of this contract, direct the Contractor to temporarily halt treatment when: vehicles and/or equipment is causing excessive soil damage such as rutting/soil erosion on roads and/or other work areas until ground condition improves.

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Access

Sites may be reached by Forest Roads that are accessible by standard pickup truck during the normal working season or by ATV. Access to Site 451-28 is by ATV only.

The Government assumes no obligation to plow snow or do special maintenance to keep roads open. An actual visit to the sites prior to bidding is encouraged to view the access to the project areas. The Contractor is responsible for any damage caused by their operations. Some project areas may be on a gated road. A Forest Service key will be provided as necessary to the successful bidder for access.

Progression of Work

The Contractor is required to inform the COR or Contract Inspector of where and when work will commence.

To avoid damaging sensitive or valuable resources the Contractor is required to halt operations and contact the COR or Contract Inspector and have the issue resolved on site if: the site appears inconsistent with instructions or maps, boundaries are questionable, requirements or restrictions are unreasonable, unreported water courses or wetlands are found on site, or should soils become too wet or rocky to complete the site safely and without damaging the resource(s).

The Government reserves the right to halt planting in any area exhibiting unacceptable planting conditions. If an area's soil is too dry, too wet or frozen, the area is unacceptable for planting.

Contractor is responsible for calling PA-1 Call (1-800-242-1776) and adhering to those procedures before auger planting or fence building begins at a site. Contractor needs to give his or her own phone number as the call-back number when submitting information to PA-1 Call. Detailed directions to each site will be provided to the contractor prior to the start of work.

DIVISION 200 - TECHNICAL SPECIFICATIONS

200. Description of Planting Stock – In order to meet the intent of Allegheny National Forest Land and Resource Management Plan (2007) design criteria for 2070 Biological Diversity Guidelines - Only PA ecotypes will be accepted, if they are not available another PA ecotype species may substituted and/or the percent of another species increased to equal 100% with contracting officer approval.

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201. White spruce: 18” – 24” in height, bare root.

202. Apple Trees: 4 feet – 5 feet in height, Zone 4 tolerance,

210. Fencing Material

211. Fence – RL 2672-6-14½ Poultry and Rabbit Fence, 6 feet in height

212. Posts – 8’ Studded “T” Fence Posts

213. Wire Fence Ties – 12 inch, 16 gauge galvanized wire ties

220. Planting Equipment

221. Planting Tools

Contractor's planting tools shall meet the following minimum requirements:

A. Augers - The augers used shall be capable of drilling a minimum 4-inch diameter hole to a depth 2 inches deeper than the specified root length. Flighting on the auger shaft shall have a minimum diameter of 4 inches.

B. Scalping Tools - To do necessary spot preparation while planting, the tool selected shall be capable of cutting and removing living vegetation at the root crown. The planting spot preparation may be done in advance of actual planting.

C. Planting Bar - The bar used shall be capable of creating a hole to a depth of 12 inches.

D. Shovel - A spade, shovel or similar digging tool will be required to prepare a hole large enough to accommodate the root systems.

222. Planting Bags

Planting bags shall be a light color, not retain heat, have a minimum depth of 15 inches, and be free of defects.

230. Care of Trees

231. The Contractor shall adhere to the following specifications for care and protection of tree seedlings, shrubs, or saplings in his or her possession:

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- A. Tree seedlings and shrubs shall be protected at all times from drying, heating, smothering, freezing, crushing, drowning, abrasion, rapid temperature fluctuations, animal browsing, or contact with injurious substances.
- B. Tree seedlings and shrubs stored in boxes, bags, or bundles shall not be exposed to direct sunlight. Punctured or torn bags or boxes must be promptly resealed. Containers of tree seedlings shall be opened only in full shade. Bundles, bags, or boxes shall be separated to provide free air movement.
- C. Tree seedlings and shrubs shall not be removed from shipping containers until needed.
- D. Tree seedlings and shrubs shall be planted without further top pruning or culling. If pruning or culling appears necessary, or if mold, dry roots, evidence of injury or dying is seen, the condition shall immediately be reported to the Contracting Officer's Representative.
- E. Root pruning is allowed only on individual tree seedlings that have roots that exceed 12 inches in total length. Pruning will result in the removal of only that material needed to make the root 12 inches in length. **Root pruning is not allowed unless specifically approved by the Contracting Officer's Representative.**
- F. Tree seedlings or shrubs that are frozen shall not be handled until completely thawed. They shall be thawed in full shade.
- G. Tree seedlings and shrubs removed from cold storage facilities shall not be allowed to stand, or lay in water or snow or be covered with snow.

232. Field Handling

Tree seedlings, shrubs, or saplings in possession of planters shall be handled in accordance with the following:

- A. Tree seedlings and shrubs in planting bags shall have only their tops exposed.
- B. Tree seedlings and shrubs shall not be removed from the planting bag until immediately before planting in a prepared hole.
- C. Tree seedlings and shrubs shall be gently removed, one at a time, to prevent stripping or other injury, and quickly and gently inserted into the planting hole.
- D. Tree seedlings and shrubs carried in planting bags shall not exceed the amount that can be carried and removed without injury, or which can be planted before critical heating or drying occur. No more than 150 trees per bag will be permitted. Tree seedlings and shrubs placed in

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bags shall be planted out and not returned to storage. Seedlings and shrubs in planting bags shall be planted the same day they are removed from cold storage.

E. Tree seedling and shrubs roots shall be kept wet at all times. To facilitate this, the contractor is advised to place an inert moisture holding substance in the bottom of the planting bag along with the seedlings.

F. Planting bags shall be emptied of accumulated debris and water each time the bag is refilled with tree seedlings or shrubs.

240. Spacing and Spot Selection

Trees shall be planted in spots distributed over the area at intervals agreed to at the time of implementation. For individual trees planted, the specified average spacing may be varied up to 25 percent in any direction to find a suitable planting spot. If a suitable planting spot cannot be found by varying the specified spacing by up to 25 percent, the spot shall be considered unplantable and the planter shall move on to the next planting spot.

Trees to be planted in individual fences will be planted in the center of each individual tree fence.

241. When the Contractor adjusts the spacing within the 25 percent limit, as described above, the point of reference for planting the next tree shall be the point where the adjusted tree would have been planted had spacing not been varied.

242. Spots considered unplantable include, but are not limited to, stumps, logs, rock outcrops, permanent roadbeds, concentrations of compacted bark and debris over 8 inches in depth, clumps of heavy grass, or mounds of loose soil subject to unusual drying or erosion. Sites that contain ground water at or near the surface, and clumps of desirable vegetation (i.e. black cherry) are also considered unplantable.

243. Number of Attempts - Should the initial attempt to create a planting hole by auger, planting bar, or shovel fail because of subsurface rocks, roots or other obstacles, a second effort shall be made in a slightly different part of the same planting spot. If this effort also fails for similar reasons, a third attempt shall be made in another part of the planting spot. If the third effort also fails, the spot shall be abandoned as unplantable.

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250. Preparing the Site

251. Above Ground

Before preparing the planting hole, the Contractor shall clear and scalp the planting spot of all limbs, logs, debris, ash, duff, snow, frost, bark, rotten wood, rocks, roots, crowns of living plants, and other material to expose moist mineral soil and facilitate proper planting and growth of tree. Planting spot dimensions are 24 inch by 24 inch, unless otherwise specified.

252. Below Ground

A. Auger Planting

Planting holes shall be located near the center of the prepared area and shall be oriented at an angle between perpendicular to the slope and true vertical. The Contractor is expected to open planting holes in hard as well as easily plantable ground.

1. A 4-inch diameter hole shall be drilled at least 2 inches deeper than the maximum seedling root length. Since the roots may be pruned back to 12 inches, the maximum hole depth required is 14 inches.
2. The Contracting Officer reserves the right to limit the number of holes the auger operator progresses in advance of the planter.
3. Auxiliary holes shall be drilled in cleared areas if needed to provide additional moist mineral soil to fill the planting hole. Auxiliary holes shall be drilled no closer than 9 inches from the planting hole. Auxiliary holes shall be filled in with debris or collapsed after the tree has been planted.

B. Planting Bar or Shovel

Planting holes shall be located near the center of the prepared area and shall be oriented at an angle between perpendicular to the slope and true vertical. The Contractor is expected to open planting holes in hard as well as easily plantable ground.

1. Planting Bar - a planting bar or similar tool will be used to create a hole up to 12 inches deep, so that the hole is two inches deeper than the maximum root length
2. Shovel - a hole up to 24 inches deep and 24 inches in diameter will be prepared so that the root system can be placed in a near natural arrangement.

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260. Tree Placement

261. All plants shall be suspended near the center of the hole with roots in a near natural arrangement at a depth that after filling, packing, and leveling, the soil comes to a point even with the original ground line of the tree. No portion of the roots should be exposed nor any leaves or branches covered with soil. The roots shall not be doubled up, twisted, spiraled, or bunched. The root system shall be aligned with the axis of the planting hole with all roots extending downward.

262. Bare root tree seedlings and shrubs shall be planted to a depth such that the firmed soil level is just above (less than ½ inch) the root collar.

270. Filling and Firming

Moist mineral soil shall be filled in and firmed around roots. Dry soil, ash, organic matter, rock, and other foreign material shall be kept out of holes. Soil shall be filled in and firmed progressively so no loose soil or air pockets remain and seedling or shrub is as firmly planted, as soil conditions will allow. The Contractor shall not wedge the sides of the hole and firming the soil around the tree or shrub shall be done in a manner that assures the tree and root systems are not damaged. After the soil is firmed around the tree or shrub, it shall be smoothed out to the level of the surrounding mineral soil surface. After planting, the tree or shrub stem shall be erect and free to grow. The tree or shrub shall not be weighted down with mud or debris.

280. Installing Tree Mats and Construction of Cribs and Individual Tree Fences

281. Individual Tree Fences.

The individual fences will be square in shape, with 5 feet to a side. They will be constructed with 6-foot high woven wire fencing and four 8-foot tall metal posts per fence to the same specifications listed above for crib construction.

Individual tree fences may be constructed immediately following planting of stock, provided planted trees are not damaged in any way from construction of fence. Individual tree fences must be constructed such that planted stock is centered within the fence.

282. Tree Mats

Tree mats are installed on shrubs after planting and before fencing and are installed on saplings after the stock has been planted and the shelter installed. Mats consist of a 3-foot square black polyethylene mat. Approximately nine mats weigh 1 pound. The following procedure should be used when installing mats:

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A. Clear away loose brush and debris around the seedling. The more the tree mat lays on the ground the better. Tree mats have a shiny side and a dull side. **THE SHINY (SMOOTH) SIDE GOES UP.** Carefully guide the slit in the tree mat down over the seedling (See Exhibit B). Center the seedling in the slit.

B. When installing a mat around a seedling, staple the center of the tree mat so that the material is not touching the stem of the seedling. Use 11 gauge staples, 6 in. by 6 in. Spread the mat out and fold and staple each corner (Exhibit B). The mat should be touching the ground, but not taut.

C. When installing a tree mat around a shelter, gently pull the tree mat down over the shelter, until it is flat on the ground. A center staple is not needed. Spread mat out flat and staple each corner as described above.

283. Tree guards will be installed according to manufacturer's directions.

290. Protection of Existing Structures

The contractor shall be required to protect existing improvements such as roads (including system, OGM woods or skid trails), pipelines, fences, gates, buildings, water bars, plantings, nesting structures, oil/gas equipment, etc., which are located in the project area. The contractor shall be required to repair or replace such improvements if damaged as a result of their operations. This includes replacing and re-seeding water bars and earthen barricades, roadside ditches, culverts and signs if disturbed as a result of this contract. Any rocks or slash removed for access must be replaced.

There are active oil leases surrounding these sites.

Cultural Resource Surveys have been conducted and there are no known cultural sites within these areas. If during the execution of this contract the operator unearths a site, work must cease in the general area and the Contract Inspector or COR notified immediately.

Project Area Materials Staging

Staging areas large enough for gathering, sorting, piling, etc. of removed materials prior to removal from Forest Service land are permitted in each project area. It is the Contractor's responsibility to notify the Forest Service in writing as to the desired location for each staging area. Locations will be mutually agreed upon prior to the start of operations.

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Work Area and Equipment Clean Up

The contractor shall clean up the work area in and around each contract item prior to the Government accepting the item as complete. This cleanup includes removal of all excess and discarded materials associated the project, as well as other activities of the contractor.

Contractor shall ensure that prior to moving any equipment to a work site, between work sites, and from the Allegheny National Forest, all planting equipment such as but not limited to: augers, shovels, and planting bars are free of soil, seeds, vegetative matter or other debris that could contain or hold seeds. Off-road equipment used for transport of materials such as ATV's and trailers shall also be free of soil, seeds, vegetative matter or other debris that could contain or hold seeds. Equipment shall be considered free of soil, seed and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required. Cleaning of equipment may entail brushing or hosing off. The use of detergents or other cleaning agents are not to be used unless they are used at a car wash or other facility equipped for water catchment and treatment. Equipment is not be cleaned in streams, ditches or other waterways. If the contractor desires to clean the equipment on National Forest land, the contractor and Forest Service shall agree on locations for the cleaning.

Contractor is responsible for calling PA-1 Call (1-800-242-1776) and adhering to those procedures before auger planting or fence building begins at a site. Contractor needs to give his or her own phone number as the call-back number when submitting information to PA-1 Call. Detailed directions to each site will be provided to the contractor prior to the start of work.

Time of Performance

Sites 442-40, 446-33, 487-34 and 494-48 shall be planted the year following the opening restoration work, during the month of May.

Site 451-28 may be planted any year of the contract, during the month of May.